DISCRETE MATHEMATICS IN CHINA

CONTENTS

Preface 1

W. Chu and L.C. Hsu
On some classes of inverse series relations and their applications 3

Z. Dai, X. Feng, M. Liu and Z. Wan
Nonlinear feedforward sequences of *m*-sequences I 17

F. Dong and Y. Liu
Counting rooted near-triangulations on the sphere 35

Z. Gao
The number of degree restricted maps on general surfaces 47

Y. Hong
Bounds of eigenvalues of graphs 65

Q. Li and J. Shao
The index set problem for Boolean (or nonnegative) matrices 75

Y. Liu
On functional equations arising from map enumerations 93

F. Shi and W. Li
The density of a maximum minimal cut in the subset lattice of a finite set is almost one 111

S.-T. Ting and S.-Y. Zhao
The general Steiner problem in rectangular crisscross space 117

G.-Z. Tu
A combinatorial formula relating to Hirota's bilinear equations 121

Z. Wan
Anzahl theorems in finite singular symplectic, unitary and orthogonal geometries 131

W.-D. Wei, S. Gao and B. Yang
Cyclic near difference sets of type 1 151

W.-D. Wei and J.-Y. Xu
Cycle index of direct product of permutation groups and number of equivalence classes of subsets of Z_v 179

L. Zhu
Some recent developments on BIBDs and related designs 189

Author index to volume 123 215